



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,923	10/06/2000	Steven Bechhofer	40108/00101	3044

30636 7590 12/30/2003  
FAY KAPLUN & MARCIN, LLP  
150 BROADWAY, SUITE 702  
NEW YORK, NY 10038

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/680,923

Applicant(s)

BECHHOFFER ET AL.

Examiner

Susanna M. Diaz

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-15 are presented for examination.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, the steps in claims 1-9 could be performed entirely in the mind of a human and therefore do not necessarily incorporate technology; therefore, while claims 1-9 recite the useful, concrete, and tangible result of projecting conditions

Art Unit: 3623

of a business entity, they are deemed to be non-statutory for failure to apply, involve, use, or advance the technological arts.

Furthermore, claims 10-14 are directed toward software *per se*, which is deemed to be non-statutory.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-6, 10, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruce (US 2002/0049621 A1).

Bruce discloses a method of projecting a future condition of a business entity, comprising the steps of:

[Claim 1] identifying a plurality of risks and a plurality of opportunities for the business entity (¶¶ 262-271, 302-308, 339-353, 467-470, 489-490, 526, 529-591);

evaluating at predetermined times a potential impact of each of the risks and each of the opportunities on the future condition of the business entity (¶¶ 262-271 --

Discusses forecasted risks and opportunities; 302-308, 339-353, 467-470 -- Potential,

Art Unit: 3623

i.e., future, risk or potential, i.e., future, opportunity of any given job are evaluated; 489-490, 526, 529-591);

determining at each of the predetermined times for each of the risks one of a probability that the risk will come to pass during a predetermined period of time and a frequency at which the risk will come to pass (§§ 262-271 -- Discusses forecasted risks and opportunities; 302-308, 339-353, 467-470 -- Potential, i.e., future, risk or potential, i.e., future, opportunity of any given job are evaluated. Also, risk is equated to a product defect rate, i.e., a frequency of occurrence of defects; therefore, evaluating the potential risk thereof would also yield understanding of a future potential frequency of occurrence of defects; 489-490, 526, 529-591);

determining at each of the predetermined times for each of the opportunities one of a probability that the opportunity will become available to the business entity during a predetermined period of time and a frequency at which the opportunity will become available to the business entity (§§ 262-271 -- Discusses forecasted risks and opportunities; 302-308, 339-353, 467-470 -- Potential, i.e., future, risk or potential, i.e., future, opportunity of any given job are evaluated. Also, risk is equated to a product defect rate, i.e., a frequency of occurrence of defects; therefore, evaluating the potential risk thereof would also yield understanding of a future potential frequency of occurrence of defects. Opportunity may be associated with a lowering of a defect product rate during manufacturing; therefore, it too is associated with a predetermined time and frequency; 489-490, 526, 529-591);

projecting at each of the predetermined times the future condition of the business entity based on the potential impact of each of the risks and opportunities and based on the determinations with respect to the one of frequency and probability for each of the risks and opportunities (¶¶ 262-271, 489-490, 519, 526, 529-591);

[Claim 3] reporting each of the risks and opportunities to management of the business entity (¶¶ 262-271, 489-490, 519, 526, 529-591);

[Claim 4] handling at least one of the risks to decrease the probability that the at least one risk will come to pass (¶¶ 262-271, 489-490, 519, 526, 529-591); and

handling at least one of the opportunities to increase the probability that the at least one opportunity will become available (¶¶ 262-271, 489-490, 519, 526, 529-591);

[Claim 5] wherein one of a checklist and a questionnaire identifies one of the risks and the opportunities (¶¶ 225-271, 489-490, 519, 526, 529-591);

[Claim 6] identifying a root cause for one of the risks and the opportunities (¶¶ 225-271, 489-490, 519, 526, 529-591).

[Claims 10, 13, 14] Claims 10, 13, and 14 recite limitations already addressed by the rejection of claims 1 and 4 above; therefore, the same rejection applies.

Furthermore, as per claim 14, Bruce discloses an assessment module determining if at least two risks affect one future condition (¶¶ 262-271, 302-308, 339-353, 467-470, 489-490, 519-591).

[Claim 15] Claim 15 recites limitations already addressed by the rejection of claim 1 above; therefore, the same rejection applies.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 7-9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruce (US 2002/0049621 A1), as applied to claims 1 and 10 above.

[Claims 2, 8, 11, 12] Bruce does not explicitly teach that the future condition of the business entity is projected based on a multiplication of the potential impact of each risk by the corresponding one of frequency and probability for the risk; however, Bruce does teach that opportunities and risks are ranked based on a software company's level of willingness to accept risk in order to assist the software company in selecting a project that is most conducive to their level of willingness to accept risk (§§ 405-410). A weighted level of risk is indicative of a multiplication of the potential impact of a risk. Furthermore, as discussed above, Bruce assesses risks, such as those associated with a product defect rate (§ 467), which inherently incorporates a risk frequency and probability. Official Notice is taken that it is old and well-known in the art for software companies to assess a product defect rate, such as with their software. Analysis of such a rate facilitates understanding of how to reduce the product defect rate and mitigate its negative effects on a company's profit. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to implement with Bruce's invention the constraint that the future condition of

the business entity is projected based on a multiplication of the potential impact of each risk by the corresponding one of frequency and probability for the risk (claims 2, 11) and the step of ranking each risk based on a result of the multiplication of the potential impact of each risk by the corresponding one of frequency and probability for the risk (claim 8) in order to aid a company in reducing product defects to a level that correlates to the company's willingness to accept risk. Furthermore, by specifying a level of risk that one is willing to accept, it is understood that risk values below a threshold (i.e., one's maximum level of acceptable risk) are being accepted (claim 12).

[Claim 7] Bruce discloses the periodic collection of performance data in order to assess potential risk and opportunity (§§ 467-468); however, Bruce does not specify a particular time period corresponding to the predetermined times. Official Notice is taken that it is old and well-known in the art of data collection to periodically collect data either once a month or once a week. It is important to allow a data gatherer to specify how often data should be collected based on the data gatherer's needs. When progress is being measured and development occurs at a faster rate, then data would be more significant if collected more often than if development occurred at a slower rate. For example, if a manufacturer only produces one item a week, then the period between data collections (e.g., regarding the occurrences of defects) would be longer than if the manufacturer produces one hundred of the same item per week. Since Bruce's invention is applicable to various manufacturing (e.g., software and prescription drug) environments, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bruce's invention to



Art Unit: 3623

specifically collect data at either weekly or monthly intervals in order to allow Bruce's invention to better meet the needs of a variety of manufacturers who have differing needs for data collection and evaluation thereof.

[Claim 9] Bruce teaches that risk and opportunity data is constantly updated and re-evaluated to reflect changing conditions (¶¶ 463-470, 506, 519-521). This is performed to achieve best practices in the industry and facilitate trend analysis. Also, the historical effects of drivers on a system and the correlated performance of the drivers are evaluated in order to improve the drivers and system metrics, thereby implying that Bruce's invention is concerned with continuously optimizing the overall system model. However, Bruce does not expressly teach the step of comparing a previously projected future condition to an actual condition at a time corresponding to the previously projected future condition to determine an accuracy of the projected future condition. Official Notice is taken that it is old and well-known in the art of modeling to continuously compare forecasted to actual performance conditions in order to refine, and ultimately optimize, the model on which the forecasting is based. Since Bruce is concerned with continuously optimizing the overall system model, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bruce's invention to perform the step of comparing a previously projected future condition to an actual condition at a time corresponding to the previously projected future condition to determine an accuracy of the projected future condition in order to refine, and ultimately optimize, the model on which the forecasting is based.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Beverina et al. (US 2001/0027389 A1) -- Determines the relative risk of an undesirable event and the likelihood for success of a countermeasure to the risk.

Guinta et al. (U.S. Patent No. 6,161,101) -- Discloses an assessment of risk and areas of weakness within an organization.

Weinstock et al. (U.S. Patent No. 6,223,143 B1) -- Discloses a quantitative risk assessment system.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Any response to this action should be mailed to:

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**

or faxed to:

Art Unit: 3623

**(703)305-7687** [Official communications; including  
After Final communications labeled  
"Box AF"]

**(703)746-7048** [Informal/Draft communications, labeled  
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal  
Drive, Arlington, VA, 22202, 7<sup>th</sup> floor receptionist.



Susanna M. Diaz  
Primary Examiner  
Art Unit 3623  
December 12, 2003